# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Patent Application of Marchosky	) Group Art Unit: 3626
Application No. 09/910,190	) Examiner: Vanel Frenel
Filed: July 19, 2001	) Confirmation No. 1527
For: PATIENT-CONTROLLED AUTOMATED MEDICAL RECORD, DIAGNOSIS, AND TREATMENT SYSTEM AND METHOD	, ) ) )

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### **BRIEF ON APPEAL**

This is an appeal from the final rejection of the above-identified application made in the Office Action mailed October 4, 2006. A Notice of Appeal was submitted on April 4, 2007. A petition for a three month extension of time accompanies this appeal brief.

#### I. Real Party in Interest

The named inventor, J. Alexander Marchosky, is the real party in interest in the present appeal.

# II. Related Appeals and Interferences

Appellant and his legal representative are unaware of other appeals or interferences that would directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

#### III. Status of Claims

Claims 1-6 and 14-94 are pending in the present application. Claims 7-13 have been canceled. A copy of the pending claims is attached as an appendix.

The rejections of claims 1-6 and 14-94 are being appealed.

#### IV. Status of Amendments

The Examiner has entered all amendments.

## V. Summary of Claimed Subject Matter

Claim 1 and claims depending from claim 1 are directed to an automated, patient-controlled, medical and biographical records system. One embodiment of the system is generally described in the Specification on page 13 at lines 1-15 and identified in Fig. 1 by the reference numeral 100. The records system includes a central computer connected to a global computer network as generally described on page 13 at lines 8-10. The central computer is identified in Fig. 1 by 102 and the global computer network is identified in the Fig 1 by 104. As described in the specification at page 13 lines 10-13, the system also includes a centralized medical and biographical records database maintained at the central computer, and the database includes medical and biographical records for a plurality of individual patients. The centralized medical and biographical records database is identified by 106 and the medical and biographical patient records are identified by 112 in Fig. 1. Page 16 lines 8-19 discuss that access to each of the medical and biographical records in the database is controlled by the corresponding individual patient of the plurality of patients. The central computer executing a security program limits access to the records to the patients and to health care professionals selectively authorized by the patients as described in the Specification on page 13 line 28 through page 14 line 2. The security program is identified by 114 in Fig. 1. As introduced in the Specification on page 13 lines 13-15. the system also includes a patient computer situated remote from the central computer and connected to the global network, and a health care computer situated remote from the central computer and connected to the global network. The patient computers are identified by 108 and the health care computers are identified by 110 in Fig. 1. The patient computers each execute a software program interface for patients to input medical history and biographical information into the patient medical and biographical records database and to authorize health care professionals to access at least a portion of the records of the authorizing patients as described in the Specification on page 16 lines 13-15 and page 16 line 31 through page 17 line 16. The health care computers each execute a software program interface for the authorized health care professionals to access the medical history and biographical information from the patient medical and biographical records database and to input additional patient medical history and biographical information into the patient medical and biographical records database as described in the Specification on page 16 lines 13-15 and page 16 line 31 through page 17 line 16. One example of hardware used to perform this method is described in the preceding paragraph. The hardware components are identified by the reference numbers provided in that paragraph.

Claim 14 and claims depending from claim 14 are directed to a method for entering and retrieving patient medical and biographical record information. One embodiment of the method is generally introduced in the Specification on page 13 at lines 10-13. As discussed on page 13 lines 10-13, the method includes maintaining medical, biographical, and security information for a plurality of individual patient records in a medical and biographical records database on a centralized computer. Further, as discussed on page 13 lines 21-24, the method includes inputting patient medical and biographical information in the medical and biographical records database through a computer remotely situated from the centralized computer. In addition, the method includes inputting patient medical and biographical records security information in the medical and biographical records database through the computer remotely situated from the centralized computer as discussed on page 13 lines 16-21. Lines 21-24 of page 13 indicate the method also includes executing a security program limiting access to the medical and biographical records database to the individual patients inputting medical and biographical information into their own records and to health care professionals selectively authorized by the patients to input additional medical and biographical information to the patients' records, and executing a security program limiting access to the medical and biographical records database to the individual patients retrieving medical and biographical information from their own records and to the health care professionals selectively authorized by the patients. One example of hardware used to perform this method is described and identified by reference number in the first paragraph of this section.

Claim 49 and claims depending from claims 49 are directed to an automated medical diagnosis method. One embodiment of the method is generally introduced in the Specification on page 14 at lines 3-8. The method includes creating diagnostic questions relating to medical signs and symptoms requiring either a "yes" or a "no" response from a patient as discussed on page 29 lines 23-25. As discussed on page 31 lines 17-21, the method also includes storing the diagnostic questions on a central computer connected to a global computer network. Page 31 lines 21-26 generally describe that the method includes differentially weighting the diagnostic questions and responses according to their relative importance in determining a medical diagnosis. Further, as discussed on page 30 line 3 through page 31 line 9, the method includes providing a software program interface accessible by computers situated remote from the central computer. The interface interactively displays to patients a series of the diagnostic questions stored on the central computer. In addition, the method includes retrieving patient responses to the diagnostic questions and correlating the patient responses to a list of potential diagnoses as a function of the input responses to the medical diagnostic questions and the relative weight of the medical diagnostic questions as disclosed in the Specification on page 30 at line 3 through page 31 line 9. Still further, the method includes storing the list of potential medical diagnoses to a medical and biographical records database via the computer network. The computer network includes a security program limiting access to the medical and biographical records database to the individual patient to whom the diagnosis relates and to health care professionals selectively authorized by the patient to access the records. One example of hardware used to perform this method is described and identified by reference number in the first paragraph of this section.

Claim 68 and claims depending from claim 68 are directed to a health care finance and insurance method. Claim 68 includes maintaining medical, biographical, diagnostic, and treatment records for a plurality of individual patients in a medical and biographical records database on a centralized computer as disclosed on page 13 lines 10-13. Lines 21-24 of page 13 describe restricting access to each of the medical, biographical, diagnostic and treatment records in the database to the patients to whom the records relate and to individuals and institutions selectively authorized by the patients. The method includes maintaining insurance services wherein the services are

selected from the group consisting of terms of insurance contracts, explanation of benefits and services, pre-approval of patient services, pre-approval of treatment, approval of treatment, verification of eligibility for medical treatment, verification of treatment, and automated payment of medical treatment as described on page 41 line 29 through page 42, line 14. As discussed on page 42 lines 15-33, the method includes comparing the patient diagnosis and prescribed services or treatment records with approved therapeutic treatment for the identified diagnosis and approving or disapproving payment for the prescribed services or treatment. One example of hardware used to perform this method is described and identified by reference number in the first paragraph of this section.

#### VI. Grounds of Rejection to be Reviewed on Appeal

Claims 1-6 and 14-94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lavin (5,772,585) in view of Bessette (6,263,330) and further in view of Wilkins (6,523,009).

### VII. Argument

Issue Presented: Whether claims are improperly rejected where insufficient motivation for combining the references is provided and the combined references fail to disclose or suggest every claim requirement.

#### Claims 1-6, 73-75 and 85-94

Claims 1-6, 73-75 and 85-94 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,772,575 (Lavin) in view of U.S. Patent No. 6,263,330 (Bessette) and further in view of U.S. Patent No. 6,523,009 (Wilkins). To establish a *prima facie* case of obviousness, every claim requirement must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

Among other things, each claim recites a patient-controlled medical and biographical records system comprising: a central computer connected to a global

computer network; a centralized records database maintained at the central computer, access to each record in the database being controlled by the corresponding individual patient, said central computer executing a security program limiting record access to the patients and to health care professionals selectively authorized by the patients; patient computers each executing a program interface for patients to input medical history and biographical information into the records database and to authorize health care professionals to access at least a portion of the records of the authorizing patients; and health care computers each executing a program interface for the authorized health care professionals to access the medical history and biographical information from the records database and to input additional patient medical history and biographical information into the patient database.

Lavin discloses a system allowing medical personnel to access patient medical information. Lavin does not disclose a system used by patients. Rather, the system is described as being used exclusively by medical personnel. Lavin does not disclose a database in which access to each record in the database is controlled by the individual patient. Further, Lavin does not disclose or suggest a central computer executing a security program limiting access to records to patients and health care professionals selectively authorized by the patients. In addition, Lavin does not disclose or suggest patient computers executing a program for patients to input information and to authorize health care professionals to access at least some of their records. Thus, Lavin fails to disclose or suggest several elements recited in the claims.

Bessette discloses a system for storing medical records in which a portion of the patient information is stored on a portable storage media. Bessette, like Lavin, fails to not disclose <u>a system</u> used by patients. The Bessette system is described as being used exclusively by medical personnel. In addition, Bessette does not disclose or suggest a central computer executing a security program limiting access to records to patients and health care professionals selectively authorized by the patients <u>or</u> a database maintained at the central computer in which access to each record in the database is controlled by a corresponding individual patient <u>or</u> patient computers executing a program for patients to input information and to authorize health care professionals to access at least some of their records.

Wilkins discloses an individualized patient medical records system providing unlimited patient access to his or her medical records. However, like the other two cited references, Wilkins does not disclose or suggest a central computer executing a security program limiting access to records to patients and health care professionals selectively authorized by the patients <u>or</u> a database maintained at the central computer in which access to each record in the database is controlled by a corresponding individual patient <u>or</u> patient computers executing a program for patients to input information and to authorize health care professionals to access at least some of their records.

In support of his obviousness position, the Examiner cites a passage from Wilkins that states:

Preferably, the medical care providers will diagnose, identify and outline medical treatment and procedures, define prognosis. conduct necessary tests and procedures, review the results, and make notes or other comments on the patient and her/his condition and treatment, and then construct or write and then record electronically all of the information and data, both text and non-text format, on the mobile storage device for electronically recording and storing the comprehensive individualized patient medical records. The number, type, and location of medical care providers is not limited by the present invention; anyone having the standard computer and computer software program necessary for reading and writing records within the comprehensive individualized patient medical records system and having access to the electronic mobile storage device, which is preferably patient-owned and controlled, can utilize the system. According to the present invention, medical care providers and users of the electronic individualized patient medical records system are identified via identification means, more specifically by a passcode or bio-identification, including but not limited to fingerprint, DNA, retinal scan, etc. The user identification permits access to all or part of the patient records and permits or restricts access to read and write or to read-only.

U.S. Patent No. 6,523,009, column 4, lines 29 - 52 (emphasis added). Although this passage describes a patient medical records system in which the storage device on which the records are stored is patient-owned and controlled, Wilkins does not cure the deficiencies of Lavin and Bessette described above. Nothing in this passage provides or suggests a system as recited in the claims, including a central computer executing a security program and a database in which the patients selectively authorize access, or

patient computers executing a program for patients to input information and to authorize health care professionals to access.

As discussed above, several elements recited in the claims are not disclosed or suggested by the references. These omitted elements are only supplied by hindsight. Without referring to the subject application and only referring to prior art, an ordinarily skilled artisan would not be motivated to supply the omitted elements. Rather, referring only to the prior art, a skilled artisan would be motivated to develop a system used by medical personnel having portable storage that is retained by the patient. There would be no need to include a software interface providing selective authorization to the database as recited in the claims. Therefore, even if one were motivated to combine the references, the combined references would not render the claims obvious.

Moreover, the explanation of motivation offered by the Examiner for combining the references is insufficient and developed through hindsight. As an initial matter, the explanation of motivation offered in the Office action is incomplete as no motivation is offered for combining Bessette with Lavin. The Examiner states, "It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Wilkins within the collective teachings of Lavin and Bessette with the motivation of providing an individualized patient electronic medical records system for unlimited patient access to her/his personal and comprehensive medical records." In support of this assertion, the Examiner cites a passage from Wilkins, which states, "Thus, the present invention provides an individualized patient electronic medical records system for unlimited patient access to her/his personal and comprehensive medical records." U.S. Patent No. 6.523.009. column 3 lines 16-19.

Although this passage suggests providing patient access to his/her records, Wilkins provides only for portable storage devices, and does not teach that patient control is desirable in large medical databases such as described in Lavin and Bessette. Such a teaching would be needed as motivation for combining Wilkins with Lavin and Bessette. The Examiner does not provide legitimate motivation, but rather pieces together unrelated disclosures in an attempt to show that some of the claim elements are found in the prior art. Because the Office action fails to provide motivation for combining the cited references, a *prima facie* case has not been made. Accordingly, the Section 103 rejection should be overturned.

If an independent claim is non-obvious, then any claim depending from it is non-obvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Thus, the Section 103 rejections of Claims 2-6, 73-75 and 85-94, which depend from independent claim 1, are improper and should be reversed.

#### Claims 14-48, 76-78

Claims 14-48 and 76-78 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,772,575 (Lavin) in view of U.S. Patent No. 6,263,330 (Bessette) and further in view of U.S. Patent No. 6,523,009 (Wilkins). To establish *prima facie* obviousness, every claim requirement must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

Claims 14-48 and 76-78 recite a method for entering and retrieving patient medical and biographical record information comprising the steps of: maintaining information for individual patient records in a database on a centralized computer; inputting patient information in the database through a computer remotely situated from the centralized computer; inputting patient records security information in the database through the computer remotely situated from the centralized computer; executing a security program limiting access to the database to the individual patients inputting information into their own records and to health care professionals selectively authorized by the patients to input additional information to the patients' records; and executing a security program limiting access to the database to the individual patients retrieving information from their own records and to the health care professionals selectively authorized by the patients.

None of the cited references discloses or suggests a method including the steps of executing a security program limiting access to the database to patients inputting medical and biographical information into their own records and health care professionals selectively authorized by the patients to input additional medical and biographical information to the patients' records or executing a security program limiting access to the database to the individual patients retrieving information from their own records and to the health care professionals selectively authorized by the patients.

As discussed above, the Examiner provides no motivation for combining Lavin and Bessette and provides insufficient motivation for combining Wilkins with Lavin and Bessette.

Because the references taken separately or combined fail to disclose or suggest the elements of Claim 14, and the motivation is insufficiently articulated, a prima facie case has not been made. Therefore, the Section 103 rejection is improper and should be withdrawn.

If an independent claim is non-obvious, then any claim depending from it is non-obvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Thus, the Section 103 rejections of Claims 15-48 and 76-78, which depend from independent Claim 14, are improper and should be reversed.

#### Claims 49-67 and 79-81

Claims 49-67 and 79-81 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,772,575 (Lavin) in view of U.S. Patent No. 6,263,330 (Bessette) and further in view of U.S. Patent No. 6,523,009 (Wilkins). To establish *prima facie* obviousness of a claimed invention, every claim requirement must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

Claims 49-67 and 78-81 recite an automated medical diagnosis method comprising the following steps: creating a plurality of diagnostic questions relating to medical signs and symptoms; storing said diagnostic questions on a central computer connected to a global computer network; differentially weighting the diagnostic questions and responses according to their relative importance in determining a medical diagnosis; providing a software program interface accessible by computers situated remotely from the central computer, said interface interactively displaying to patients a series of the diagnostic questions stored on the central computer; retrieving patient responses to the diagnostic questions and correlating the patient responses to a list of potential diagnoses as a function of the input responses to the medical diagnostic questions; and storing the list of potential medical diagnoses to a medical and biographical records database via the computer network including a security program limiting access

to the medical and biographical records database to the individual patient to whom the diagnosis relates and to health care professionals selectively authorized by the patient to access the records.

None of the cited references discloses or suggests an automated medical diagnosis method comprising differentially weighting the diagnostic questions and responses according to their relative importance in determining a medical diagnosis or storing the list of potential medical diagnoses to a medical and biographical records database via the computer network including a security program limiting access to the medical and biographical records database to the individual patient to whom the diagnosis relates and to health care professionals selectively authorized by the patient to access the records. Further, there is no motivation for modifying the cited references to suggest these elements. Because the references taken alone or in combination fail to disclose or suggest these elements, the Section 103 rejection is improper and should be withdrawn.

In addition, the Office action fails to provide motivation for combining the first two references and provides insufficient motivation for combining the third reference with the other two as discussed above. Because the motivation is insufficiently articulated, a *prima facie* case has not been made. Therefore, the Section 103 rejection is improper and should be withdrawn.

If an independent claim is non-obvious, then any claim depending from it is non-obvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Thus, the Section 103 rejections of Claims 50-67 and 79-81, which depend from independent Claim 49, are improper and should be reversed.

#### Claims 68-72 and 82-84

Claims 68-72 and 82-84 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,772,575 (Lavin) in view of U.S. Patent No. 6,263,330 (Bessette) and further in view of U.S. Patent No. 6,523,009 (Wilkins). To establish *prima facie* obviousness of a claimed invention, every claim requirement must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

Claims 68-72 and 82-84 recite a health care finance and insurance method comprising: maintaining records for individual patients in a database on a centralized computer; restricting access to each of said records in the database to the patients to whom the records relate and to individuals and institutions selectively authorized by the patients; maintaining insurance services wherein the services are selected from the group consisting of terms of insurance contracts, explanation of benefits and services, pre-approval of patient services, pre-approval of treatment, approval of treatment, verification of eligibility for medical treatment, verification of treatment, and automated payment of medical treatment; comparing the patient diagnosis and prescribed services or treatment records with approved therapeutic treatment for the identified diagnosis; and approving or disapproving payment for the prescribed services or treatment.

None of the cited references discloses or suggests a health care finance and insurance method comprising restricting access to each of said medical, biographical, diagnostic and treatment records in the database to the patients to whom the records relate and to individuals and institutions selectively authorized by the patients; maintaining insurance services wherein the services are selected from the group consisting of terms of insurance contracts, explanation of benefits and services, pre-approval of patient services, pre-approval of treatment, approval of treatment, verification of eligibility for medical treatment, verification of treatment, and automated payment of medical treatment, or comparing the patient diagnosis and prescribed services or treatment records with approved therapeutic treatment for the identified diagnosis, or approving or disapproving payment for the prescribed services or treatment

As discussed above with respect to other claims, Wilkins does not cure the deficiencies of Bessette and Lavin. Nothing in the cited references provides or suggests a method as claimed in Claim 68. Further, there is no motivation for modifying the cited references to suggest these elements. Because the references taken separately or combined fail to disclose or suggest these elements, and no proper motivation is provided by the Examiner, a prima facie case has not been made. Therefore, for this additional reason the Section 103 rejection is improper and should be withdrawn.

If an independent claim is non-obvious, then any claim depending from it is non-obvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Thus, the Section 103 rejections of claims 69-72 and 82-84, which depend from independent claim 68, are improper and should be reversed.

#### VIII. Conclusion

The rejections on appeal are in error for the reasons set forth above. Thus, Appellant requests the Examiner's rejections be reversed.

Any additional fee regarding this brief may be charged to Deposit Account No. 19-3140.

Respectfully submitted,

Dated: August 17, 2007 By: /David E. Crawford, Jr./

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#### **CLAIMS APPENDIX**

- An automated, patient-controlled, medical and biographical records system comprising:
  - a. a central computer connected to a global computer network;
  - b. a centralized medical and biographical records database maintained at the central computer, said database including medical and biographical records for a plurality of individual patients, access to each of said medical and biographical records in the database being controlled by the corresponding individual patient of said plurality of patients, said central computer executing a security program limiting access to the records to the patients and to health care professionals selectively authorized by the patients;
  - c. one or more patient computers situated remotely from the central computer and connected to the global network, said patient computers each executing a software program interface for patients to input medical history and biographical information into the patient medical and biographical records database and to authorize health care professionals to access at least a portion of the records of the authorizing patients;
  - d. one or more health care computers situated remotely from the central computer and connected to the global network, said health care computers each executing a software program interface for the authorized health care professionals to access the medical history and biographical information from the patient medical and biographical records database and to input additional patient

medical history and biographical information into the patient medical and biographical records database.

- The medical and biographical records system of claim 1, wherein the security program includes a routine permitting a patient to limit the extent and type of information in the patient's record that authorized health care professionals may access.
- 3. The medical and biographical records system of claim 2, wherein the security program is responsive to the patient selectively limiting the extent and type of information that the authorized health care professional may access based upon relevancy of the information to the specialty of the health care professional.
- 4. The medical and biographical records system of claim 2, wherein the security program is responsive to the patient selectively limiting the extent and type of information based upon a degree of confidentiality assigned by the patient to the different medical and biographical information stored in the patient's record for limiting access of the health care professionals to the information.
- 5. The medical and biographical records system of claim 2, wherein the security program identifies and records all inquiries to access records in the medical and biographical records database.

6. The medical and biographical records system of claim 2, wherein the security program identifies and records the health care professionals or patients who enter and store new information in the medical and biographical records database.

#### 7-13. (canceled)

- 14. A method for entering and retrieving patient medical and biographical record information comprising the steps of:
  - maintaining medical, biographical, and security information for a plurality of individual patient records in a medical and biographical records database on a centralized computer;
  - inputting patient medical and biographical information in the medical and biographical records database through a computer remotely situated from the centralized computer;
  - c. inputting patient medical and biographical records security information in the medical and biographical records database through the computer remotely situated from the centralized computer:
  - d. executing a security program limiting access to the medical and biographical records database to the individual patients inputting medical and biographical information into their own records and to health care professionals selectively authorized by the patients to input additional medical and biographical information to the patients' records; and
  - e. executing a security program limiting access to the medical and biographical records database to the individual patients retrieving medical and

biographical information from their own records and to the health care professionals selectively authorized by the patients.

- 15. The method of claim 14, further comprising the step of selectively limiting the extent and type of information in a patient's record that authorized health care professionals may access.
- 16. The method of claim 15, wherein the step of selectively limiting the extent and type of information includes further limiting the extent and type of information that authorized health care professionals may access based upon relevancy of the information to the specialty of the health care professional.
- 17. The method of claim 16, wherein the security program permits patients to selectively authorize medical and biographical information to be shared between primary and specialist health care professionals.
- 18. The method of claim 17, further comprising the step of identifying all inquiries to patient records.
- The method of claim 18, further comprising the step of identifying individuals entering and storing new information in the patient records.
- 20. The method of claim 14, wherein the patient medical and biographical information is information selected from the group consisting of patient genetic history,

patient social history, patient mental and emotional health history, patient surgical history, patient environmental history, patient dental and oral health history, patient laboratory results, patient radiological and imaging history, patient organ system history, treatment and medication history, patient otologic and ophthalmological history, and anatomical, biochemical, physiological, pathological, and genetic histories.

- 21. The method of claim 14, further comprising the step of assigning a degree of confidentiality by the patient to the different medical information stored in the patient's record, and wherein the step of selectively limiting the extent and type of information includes further limiting the extent and type of information that authorized health care professionals may access based upon the assigned degree of confidentiality.
- 22. The method of claim 14, further comprising the step of storing potential medical diagnoses, at the option of the patient, to the patient's medical and biographical record stored on the central computer.
- 23. The method of claim 22, wherein medical and biographical information is retrieved and utilized by insurance providers to provide insurance services.
- 24. The method of claim 23, wherein the insurance services are selected from the group consisting of terms of insurance contracts, explanation of benefits and services, pre-approval of patient services, pre-approval of treatment, approval of treatment, verification of eligibility for medical treatment, verification of treatment, and automated payment of medical treatment.

- 25. The method of claim 23, wherein the information is retrieved and utilized by a computer and wherein the computer determines whether an insurance claim should be either accepted or rejected.
- 26. The method of claim 23, wherein a third party intermediary possesses an insurance provider's policy criteria, compares the criteria to a patient's medical and biographical record, and determines whether an insurance claim should be either accepted or rejected.
- 27. The method of claim 23, wherein the information is retrieved and utilized by a third party computer and wherein the third party computer determines whether an insurance claim should be either accepted or rejected.

## 28. The method of claim 22, further comprising:

- a. maintaining insurance services wherein the services are selected from the group consisting of terms of insurance contracts, explanation of benefits and services, pre-approval of patient services, pre-approval of treatment, approval of treatment, verification of eligibility for medical treatment, verification of treatment, and automated payment of medical treatment;
- c. comparing the patient diagnosis and prescribed services or treatment records with approved therapeutic treatment for the identified diagnosis; and
- d. approving or disapproving payment for the prescribed services or treatments.

- 29. The method of claim 28, further comprising
  - a. maintaining health care coverage information for individual patients identifying patient contribution requirements;
  - maintaining health care coverage information for individual patients identifying insurer contribution requirements;
  - maintaining financial accounts for health care premiums and payment of health care treatments;
  - d. paying health care provider for approved services or treatments; and
  - e. billing patient and insurer according to their contribution proportions.
- 30. The method of claim 29, further comprising financially managing accounts in a manner that produce financial benefits to the patient.
- 31. The method of claim 30, wherein the financial benefits are selected from the group consisting of accrued interest, purchasing of additional insurance, and dividends.
- 32. The method of claim 29, wherein the insurer is the patient's employer or an insurance company.
- 33. The method of claim 14, further comprising the following steps:
  - a. creating a plurality of diagnostic questions relating to medical signs and symptoms requiring either a "yes" or a "no" response from a patient;

- storing said diagnostic questions on a central computer connected to a qlobal computer network;
- differentially weighting the diagnostic questions and responses according to their relative importance in determining a medical diagnosis;
- d. providing a software program interface accessible by computers situated remotely from the central computer, said interface interactively displaying to patients a series of the diagnostic questions stored on the central computer;
- e. retrieving patient responses to the diagnostic questions and correlating the patient responses to a list of potential diagnoses as a function of the input responses to the medical diagnostic questions and the relative weight of the medical diagnostic questions; and
- f. providing the list of potential medical diagnoses to the patient via the computer network and remote computer.
- 34. The method of claim 33, further comprising storing potential medical diagnoses, at the option of the patient, to the patient's medical and biographical record stored on the central computer.
- 35. The method of claim 33, further comprising providing a health care professional with the patients list of potential medical diagnoses at the patient's request.
- 36. The method of claim 14, wherein the security program limits access to the medical and biographical records database to health care providers inputting or retrieving medical and biographical information into their own patient records and to

health care professionals selectively authorized by the health care provider to input additional medical and biographical information to the patient records.

- 37. The method of claim 36, wherein medical and biographical information is retrieved and utilized by insurance providers to provide insurance services.
- 38. The method of claim 37, wherein the insurance services are selected from the group consisting of terms of insurance contracts, explanation of benefits and services, pre-approval of patient services, pre-approval of treatment, approval of treatment, verification of eligibility for medical treatment, verification of treatment, and automated payment of medical treatment.
- 39. The method of claim 37, wherein the information is retrieved and utilized by a computer and wherein the computer determines whether an insurance claim should be either accepted or rejected.
- 40. The method of claim 37, wherein a third party intermediary possesses an insurance provider's policy criteria, compares the criteria to a patient's medical and biographical record, and determines whether an insurance claim should be either accepted or rejected.
- 41. The method of claim 37, wherein the information is retrieved and utilized by a third party computer and wherein the third party computer determines whether an insurance claim should be either accepted or rejected.

## 42. The method of claim 36, further comprising:

- a. maintaining insurance services wherein the services are selected from the group consisting of terms of insurance contracts, explanation of benefits and services, pre-approval of patient services, pre-approval of treatment, approval of treatment, verification of eligibility for medical treatment, verification of treatment, and automated payment of medical treatment:
- c. comparing the patient diagnosis and prescribed services or treatment records with approved therapeutic treatment for the identified diagnosis; and
- d. approving or disapproving payment for the prescribed services or treatments.

### 43. The method of claim 42, further comprising

- a. maintaining health care coverage information for individual patients identifying patient contribution requirements;
- b. maintaining health care coverage information for individual patients identifying insurer contribution requirements;
- maintaining financial accounts for health care premiums and payment of health care treatments;
- d. paying health care provider for approved services or treatments; and
- e. billing patient and insurer according to their contribution proportions.
- 44. The method of claim 43, further comprising financially managing accounts in a manner that produce financial benefits to the patient.

- 45. The method of claim 44 wherein the financial benefits are selected from the group consisting of accrued interest, purchasing of additional insurance, and dividends.
- 46. The method of claim 43, wherein the insurer is the patient's employer or an insurance company.
- 47. The method claim 36, further comprising the following steps:
  - a. creating a plurality of diagnostic questions relating to medical signs and symptoms requiring either a "yes" or a "no" response from a health care provider;
  - storing said diagnostic questions on a central computer connected to a global computer network:
  - differentially weighting the diagnostic questions and responses according to their relative importance in determining a medical diagnosis;
  - d. providing a software program interface accessible by computers situated remotely from the central computer, said interface interactively displaying to patients a series of the diagnostic questions stored on the central computer;
  - e. retrieving responses to the diagnostic questions and correlating the
    responses to a list of potential diagnoses as a function of the input responses to
    the medical diagnostic questions and the relative weight of the medical
    diagnostic questions; and
  - f. providing the list of potential medical diagnoses via the computer network and remote computer.

- 48. The method of claim 47, further comprising storing potential medical diagnoses, at the option of the health care provider, to the health care provider's medical and biographical patient record stored on the central computer.
- 49. An automated medical diagnosis method comprising the following steps:
  - a. creating a plurality of diagnostic questions relating to medical signs and symptoms requiring either a "yes" or a "no" response from a patient;
  - storing said diagnostic questions on a central computer connected to a global computer network;
  - differentially weighting the diagnostic questions and responses according to their relative importance in determining a medical diagnosis;
  - d. providing a software program interface accessible by computers situated remotely from the central computer, said interface interactively displaying to patients a series of the diagnostic questions stored on the central computer;
  - e. retrieving patient responses to the diagnostic questions and correlating the patient responses to a list of potential diagnoses as a function of the input responses to the medical diagnostic questions and the relative weight of the medical diagnostic questions; and
  - f. storing the list of potential medical diagnoses to a medical and biographical records database via the computer network, said computer network including a security program limiting access to the medical and biographical records database to the individual patient to whom the diagnosis relates and to health care professionals selectively authorized by the patient to access the records.

- 50. The method of claim 49, further comprising the step of storing potential medical diagnoses, at the option of the patient, to the patient's medical and biographical record stored on the central computer.
- 51. The method of claim 49, further compromising the step of identifying a relative likelihood for each listed potential diagnosis based upon the responses and the relative weight of the questions.
- 52. The method of claim 49, wherein the responses to the questions are weighted based on data acquired from one or more of the patient's organ system medical history, social history, family history, genealogy history, genetic constitution, laboratory and imaging tests, medications, and surgical therapies.
- 53. The method of claim 49, further comprising the steps of collecting patient health data via sensors connected to the remotely situated computers and correlating the patient health data to potential diagnoses as a function of the collected patient health data, responses to the medical diagnostic questions, and the relative weight of the medical diagnostic questions, wherein the patient health data is selected from the group consisting of anatomical, biochemical, physiological, pathological data and a combination thereof.
- 54. The method of claim 49, further comprising the step of generating images illustrating the physical location of a medical condition and limitations of function

resulting from the medical condition wherein the generated images are selected from the group consisting of three-dimensional images, holographic images, diagrams, models, pictures and illustrations.

- 55. The method of claim 49, further comprising the steps of identifying the location of a medical condition and correlating the location to a list of potential diagnoses as a function of the location, the responses to the medical diagnostic questions, and the relative weight of the medical diagnostic questions.
- 56. The method of claim 49, further comprising the steps of:
  - a. collecting patient health data via sensors connected to the remotely situated computers;
  - storing the collected patient health data to memory to form a library of patient data records measured over time;
  - c. comparing the collected patient health data to the library of patient health data records; and
  - d. correlating any variation between the collected patient health data and the library of patient health data records, the degree of variation between the collected patient health data and the library of patient health data records, responses to the medical diagnostic questions, and the relative weight of the medical diagnostic questions to potential diagnoses.
- 57. The method of claim 56, wherein the patient health data is selected from the group consisting of anatomical, biochemical, physiological and pathological data.

- 58. The method of claim 56, wherein the patient data is selected from the group consisting of heart rate, blood pressure, EKGs, EEGs, respiratory rate, temperature, metabolic profiles, organ system function tests, anatomical data, biochemical data, physiological data, pathological data, laboratory data, and radiologic and imaging data.
- 59. The method of claim 49, further comprising the steps of:
  - a. collecting patient health data via sensors connected to the remotely situated computers;
  - comparing the collected patient health data to a library of stored health data; and
  - c. correlating the degree to which the collected patient health data is related
    to the stored health data, responses to the medical diagnostic questions, and the
    relative weight of the medical diagnostic questions to potential diagnoses;

wherein the health data is data selected from the group consisting of anatomical, biochemical, physiological, pathological data and a combination thereof.

- 60. The method of claim 49, further comprising the steps of providing a list of therapeutic recommendations to treat the diagnosed condition.
- 61. The method of claim 60, further comprising:
  - selecting a therapy from the list of therapeutic recommendations;
  - storing the selected therapy to a patient's medical and biographical record;
     and

- c. providing a predicted patient outcome in response to the selected therapy.
- 62. The method of claim 61, further comprising the steps of receiving actual patient outcome data in response to the selected therapy and storing the actual patient outcome data to a patient medical and biographical record.
- 63. The method of claim 49, further comprising the step of providing to the patient referral information of one or more health care professionals or institutions who have identified themselves as being able to treat individuals having the same or similar conditions as those identified by the list of potential medical diagnoses.
- 64. The method of claim 63, further comprising the step of providing the patient with information rating the referred health care professionals institutions in treating the same or similar conditions as those identified by the list of potential medical diagnoses.
- 65. The method of claim 64, further comprising providing the patient with referral information for one or more insurance providers.
- 66. The method of claim 65, further comprising providing the patient with insurance provider registration information.
- 67. The method of claim 66, further comprising the step of providing the patient with information rating the coverage provided by the referred insurance providers in covering health care expenses.

- 68. A health care finance and insurance method comprising:
  - a. maintaining medical, biographical, diagnostic, and treatment records for a
    plurality of individual patients in a medical and biographical records database on
    a centralized computer:
  - restricting access to each of said medical, biographical, diagnostic and treatment records in the database to the patients to whom the records relate and to individuals and institutions selectively authorized by the patients;
  - c. maintaining insurance services wherein the services are selected from the group consisting of terms of insurance contracts, explanation of benefits and services, pre-approval of patient services, pre-approval of treatment, approval of treatment, verification of eligibility for medical treatment, verification of treatment, and automated payment of medical treatment;
  - d. comparing the patient diagnosis and prescribed services or treatment records with approved therapeutic treatment for the identified diagnosis; and
  - e. approving or disapproving payment for the prescribed services or treatment.
- 69. The health care finance and insurance method of claim 68, further comprising:
  - a. maintaining health care coverage information for individual patients identifying patient contribution requirements;
  - maintaining health care coverage information for individual patients identifying insurer contribution requirements;

- maintaining financial accounts for health care premiums and payment of health care treatments:
- d. paying health care provider for approved treatments; and
- e. billing patient and insurer according to their contribution proportions.
- 70. The health care finance and insurance method of claim 69, further comprising financially managing accounts in a manner that produce financial benefits to the patient.
- 71. The method of claim 70 wherein the financial benefits are selected from the group consisting of accrued interest, purchasing of additional insurance, and dividends.
- 72. The method of claim 69, wherein the insurer is the patient's employer or an insurance company.
- 73. The medical and biographical records system of claim 1, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the patient and comparing the reading to an historical reading.
- 74. The medical and biographical records system of claim 73, wherein the biometric indicator is selected from a group of indicators consisting of a fingerprint, a retinal image, an ocular image, a voice pattern, a DNA print, a biochemical type, and a blood type.

- 75. The medical and biographical records system of claim 1, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the health care professional and comparing the reading to an historical reading.
- 76. The method of claim 14, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the patient and comparing the reading to an historical reading.
- 77. The method of claim 76, wherein the biometric indicator is selected from a group of indicators consisting of a fingerprint, a retinal image, an ocular image, a voice pattern, a DNA print, a biochemical type, and a blood type.
- 78. The method of claim 14, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the health care professional and comparing the reading to an historical reading.
- 79. The method of claim 49, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the patient and comparing the reading to an historical reading.

- 80. The method of claim 79, wherein the biometric indicator is selected from a group of indicators consisting of a fingerprint, a retinal image, an ocular image, a voice pattern, a DNA print, a biochemical type, and a blood type.
- 81. The method of claim 49, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the health care professional and comparing the reading to an historical reading.
- 82. The method of claim 68, wherein access to each of said medical, biographical, diagnostic and treatment records in the database is at least partially ensured by obtaining a biometric indicator reading from the patient and comparing the reading to an historical reading.
- 83. The method of claim 82, wherein the biometric indicator is selected from a group of indicators consisting of a fingerprint, a retinal image, an ocular image, a voice pattern, a DNA print, a biochemical type, and a blood type.
- 84. The method of claim 68, wherein access to each of said medical and biographical records in the database is at least partially ensured by obtaining a biometric indicator reading from the health care professional and comparing the reading to an historical reading.

- 85. The medical and biographical records system of claim 2, wherein the security program permits patients to selectively authorize medical and biographical information to be shared between primary and specialist health care professionals.
- 86. The medical and biographical records system of claim 1, wherein the patient medical and biographical information is information selected from the group consisting of patient genetic history, patient social history, patient mental and emotional health history, patient surgical history, patient environmental history, patient dental and oral health history, patient laboratory results, patient radiological and imaging history, patient organ system history, treatment and medication history, patient otologic and ophthalmological history, and anatomical, biochemical, physiological, pathological, and genetic histories.
- 87. The medical and biographical records system of claim 2, wherein the security program permits the patient to assign a degree of confidentiality to the different medical information stored in the patient's record, and the security program selectively limits the extent and type of information that authorized health care professionals may access based upon the assigned degree of confidentiality.
- 88. The medical and biographical records system of claim 1, wherein at the patient's medical and biographical record selectively includes potential medical diagnoses at the option of the patient.

- 89. The medical and biographical records system of claim 1, wherein medical and biographical information is retrievable by insurance providers to provide insurance services.
- 90. The medical and biographical records system of claim 1, wherein medical and biographical information is retrievable by a third party intermediary possessing an insurance provider's policy criteria for comparing the criteria to a patient's medical and biographical record and determining whether an insurance claim should be accepted or rejected.
- 91. The medical and biographical records system of claim 1, wherein said central computer executing a diagnostic program that creates a plurality of diagnostic questions relating to medical signs and symptoms requiring either a "yes" or a "no" response from a patient, stores said diagnostic questions on a central computer, differentially weights the diagnostic questions and responses according to their relative importance in determining a medical diagnosis, provides a software program interface accessible by computers situated remotely from the central computer, said interface interactively displaying to patients a series of the diagnostic questions stored on the central computer, retrieves patient responses to the diagnostic questions and correlates the patient responses to a list of potential diagnoses as a function of the input responses to the medical diagnostic questions, and provides the list of potential medical diagnoses to the patient via the computer network.

- 92. The medical and biographical records system of claim 91, wherein the diagnostic program stores potential medical diagnoses, at the option of the patient, to the patient's medical and biographical record.
- 93. The medical and biographical records system of claim 91, wherein the diagnostic program provides a health care professional with the patients list of potential medical diagnoses at the patient's request.
- 94. The medical and biographical records system of claim 1, wherein the security program limits access to the medical and biographical records database to health care providers inputting or retrieving medical and biographical information into their own patient records and to health care professionals selectively authorized by the health care provider to input additional medical and biographical information to the patient records.

# **EVIDENCE APPENDIX**

(none)

# RELATED PROCEEDINGS APPENDIX

(none)